



# SERVICEGRAM

**Exclusive Ride Control Repair Tip!** 

Vol. 1 No. 1

#### Challenge:

## What Does No or Slow Rod Extension Mean for My Replacement Shock / Strut?

Piston rods on "low gas" units can take up to 2 minutes to extend, while "non-gas" units will not extend on their own.

Rod reaction can vary between two units of the same design. Once these units are broken in, however, they will provide the same performance.



#### Solution:

The primary function of gas-charging is to minimize aeration of hydraulic fluid. Gas pressure does not determine the unit's hydraulic/resistance characteristics. "Non-gas" units minimize aeration through other means.

Monroe utilizes "low gas" and "non-gas" designs in select units based on the Original Equipment requirements of the corresponding vehicle, where applicable, to help deliver "like new" ride and handling.

#### Benefits of **Low** Gas Charged Units:

- OE manufacturers utilize this damper design on vehicles that will be operated under harsh driving conditions, to help ensure durability of the unit
- A low gas design exerts less stress on the oil seal
- This design also helps to reduce ride harshness at low piston speeds





Monroe units utilizing "low gas" or "non-gas" designs will feature a special box label.

#### **Benefits of Non-Gas Charged Units:**

- Some special damper valving and design characteristics eliminate the need for gas charging
- Non-gas charge is required when the damper is designed with a large oil capacity that prevents temperatures from raising high enough to cause aeration
- On some vehicles with increased spring rate, using gas-charged dampers would result in low pistonspeed ride harshness

#### In the Bay: Is it Low Gas or Non-Gas?

To check rod reaction on ride control units, follow this process:

- Make sure unit is at room temperature
- Cycle unit from full extension to full compression 2 to 3 times with the rod facing up
- Fully compress unit and allow the rod to extend on its own. This should require less than 45 seconds on a unit with normal gas pressure and up to 2 minutes for a low gas unit. If the unit fully extends to these specs, it is considered fully functional
- Non-gas units do not extend

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